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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,566	09/11/2000	Manabu Akamatsu	040894-5574	4700

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EXAMINER	
EDWARDS, PATRICK L	
ART UNIT	**PAPER NUMBER**
2621	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/659,566	AKAMATSU ET AL.	
	Examiner	Art Unit	
	Patrick L Edwards	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-11 and 13-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2,4-11, 13-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09-30-2004 has been entered.

Response to Arguments

2. The applicant's arguments, filed on 09-30-2004, have been fully considered. A response to these arguments is provided below.

Prior Art Rejections

Summary of Argument: Applicant has amended independent claims 1 and 10, and argues that the claims—as currently amended—are not taught, disclosed, or suggested by Yoritsugu et al. (Yoritsugu). Specifically, applicant argues that Yoritsugu "discloses that a coincidence degree between a circular pattern and an object image is merely detected, but neither teaches nor suggests that a plurality of magnification levels are compared with one another."

Examiner's Response: Applicant's arguments have been fully considered, but are not persuasive. Yoritsugu discloses comparing one magnification estimate (i.e. the variable magnification of the object in question) with another magnification estimate (i.e. the variable magnification of the mask) (see paragraph [0049]).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10-11, and 13-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the preamble of this claim recites "a method of processing an input image." But the claim contains further recites a "computing means" and a "magnification estimating means," which would imply an apparatus. A claim which simultaneously claims two statutory classes (an apparatus and a method) is indefinite under 112/2d. Ex Parte Lyell 17 USPQ2d 1548 (Bd.PA&I 1990).

Claims 11 and 13-18 are rejected as being dependent upon indefinite claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4-6, 8-11, 13-15, and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoritsugu et al. (JP 10-126614 A).

As applied to claim 1, Yoritsugu et al. discloses an image processing system for processing an input image containing an object image of a predetermined pattern which may have been magnified (see Fig. 6 and paragraph [0038]: The reference describes an image processing system for processing an image that may have the specific pattern shown in Fig. 6.), said image processing system comprising:

One or more characteristic quantity computing means for computing a characteristic quantity representative of a characteristic of an object image possibly contained in an input image (see Fig. 12 and paragraph [0048]: The reference describes that section 33 acts as a windowing unit as well as an image area extraction unit. The extracted image area is the characteristic quantity.).

A plurality of magnification estimating means for computing a magnification on the basis of one or more characteristic quantities computed by and output from said one or more characteristic quantity computing means (see Fig. 12 and paragraphs [0047]-[0049]: The reference describes variable magnification masks 34a-34e in combination with the magnification estimating means 35. Therefore, each of the variable magnification masks is one of a plurality of magnification estimating means).

A judging means for judging whether or not said object image is present in said input image, on the basis of whether or not the plurality of estimated magnification levels are coincident with one another (see paragraphs [0047]-[0049]: The reference describes a judging means that judges whether the image data for processing is the object of the target detection based on the whether or not the estimated magnification levels are matching (i.e. whether or not they are coincident with one another).).

As applied to claim 2, Yoritsugu et al. discloses that the plurality of magnification estimating means compute said magnification in consideration of an error or errors of one or more characteristic quantities computed by said one or more characteristic quantity computing means (see paragraph [0058]: The reference describes that the magnification is determined based on a comparison between the values in the dictionaries 31a-31e and the value provided by the combination of mask 34a-34e and section 35. This comparison can be viewed as an error by section 35 and is used to determine the magnification.).

As applied to claim 4, Yoritsugu et al. discloses that the judging means synthetically judges whether or not said object image is present in said input image in consideration with an error or errors of magnification levels estimated by said plurality of magnification estimating means (see paragraph [0060]: The reference describes that the judging means 30' synthetically determines if the specific pattern is in the image based on the magnification.).

As applied to claim 6, which is representative of claim 5, Yoritsugu et al. discloses that the judging means judges whether or not said object image is present in said input image, from one or more characteristic quantities computed by said one or more characteristic quantity computing means and an error or errors of a plurality of magnification levels estimated by said plurality of magnification estimating means (see paragraph [0058]: The reference describes judgment section 30' for determining if the specific pattern is in the image based on the difference between the value determined by the combination of masks 34a-34e and section 35 and the value from dictionaries 31a-31e. This difference is equivalent to the error of the magnification estimating means.).

As applied to claim 8, Yoritsugu et al. discloses a resolution converting means for converting a resolution of said input image into another resolution, said resolution converting means being located at the pre-stage of said characteristic quantity computing means (see Fig. 12 and paragraph [0039]: The reference describes a resolution transducer 25 (i.e. resolution converting means) for changing the resolution of the input image into a lower resolution.).

As applied to claim 9, Yoritsugu et al. discloses a window processing means for sequentially cutting predetermined image areas out of said input image, said window processing means being located at the pre-stage of said characteristic quantity computing means (see Fig. 12 and paragraph [0046]: The reference describes a window section 33 for extracting a picture window of a predetermined area from the input image.).

As applied to claims 10, 11, 13-15, 17, and 18, which merely call for the method performed by the system of claims 1, 2, 4-6, 8, and 9, Yoritsugu et al. discloses such a method since the reference discloses the system.

As applied to claim 19, Yoritsugu et al. discloses an image forming apparatus comprising: interface means for receiving an image which may have been magnified, from an external device; image forming means for forming an image on the basis of the image data received by said interface means (see Fig. 4 and paragraph [0036]: The reference describes an image formation section 20 which carries out image formation of the image data. This image formation section has an interface that receives an input image from an external device such as a PC.), recognizing means for judging whether or not an object image is present in said input image (see Fig. 4 and paragraph [0037]: The reference describes a recognition section 22 that determines whether the specific pattern exists. This recognition section 22 includes the image processing system as described in the rejection of claim 1.); and control means for controlling an overall of said image forming apparatus, when said recognizing means judges that said object image is contained in said image data received by said interface means, said control means making said image data invalid (see Fig. 4 and paragraph [0037]: The reference describes a control section 21 that controls the overall image forming apparatus and performs output prohibition based on the results provided by the recognition section 22.).

As applied to claim 20, Yoritsugu et al. discloses that the control means performs said image invalidating process such that said control means causes said image forming means to form an image on the basis of

predetermined image data and the image data received by said interface means (see paragraph [0037]: The reference describes that if the control means performs output prohibition processing, then the control means forms an image where part of the image is blacked out (i.e. on the basis of predetermined image data and the image data received by said interface means).).

As applied to claim 21, Yoritsugu et al. discloses that the control means performs said image invalidating process such that said control means inhibits the formation of said received image data (see paragraph [0037]: The reference describes that if the control means performs output prohibition processing, then the control means suspends output of the image data.).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yoritsugu et al. (JP 10-126614 A) and Nakai et al. (U.S. Patent No. 5,539,523 A). The arguments as to the relevance of Yoritsugu et al. in the rejection of claim 1 above are incorporated herein.

Claim 7 calls for a specific color extracting means for extracting a specific color from said input image. This element is absent from Yoritsugu et al., but is disclosed in Nakai et al., which is in the same field of endeavor of image forming (see Fig. 10 and column 10, lines 35: The reference describes that a specific color in an image can be extracted.).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Yoritsugu et al. by adding a specific color extracting means at a pre-processing stage in the system as taught in Nakai et al. because, by extracting a specific color from an image, the image data is thinned allowing any future processing to be performed at a reduced speed (cost) (see Nakai et al.: column 6, lines 43-45).

As applied to claim 16, which merely calls for the method performed by the system of claim 7, the combination of Yoritsugu et al. and Nakai et al. discloses such a method since the combination discloses the system.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (703) 305-6301. The examiner can normally be reached on 8:30am - 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards

Art Unit 2621

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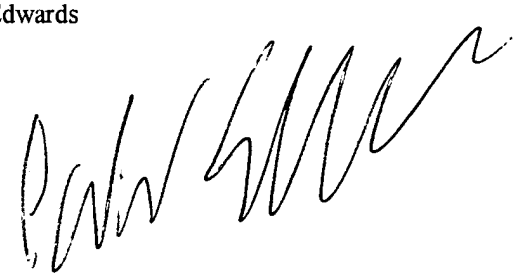

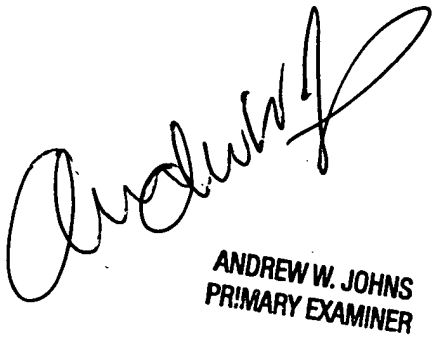

ANDREW W. JOHNS
PRIMARY EXAMINER